

Appl. No. 10/667,586
Office Action dated July 17, 2007
Amendment dated August 22, 2007

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Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in this application.

Listing of Claims:

1.-43. (Canceled)

44. (Previously Presented) A process of preparing a branched homopropylene composition comprising: contacting a polymerization mixture that comprises propylene monomers with a metallocene catalyst compound having at least two indenyl rings or derivative of indenyl rings, wherein each ring is substituted at the 2 and 4 positions, activated with a non-coordinating anion, under temperature and pressure conditions below the melting point of the propylene polymer and where:

a) the temperature is at or above the critical temperature for the reaction medium, and the pressure is at least 500 kPa above the critical pressure of the reaction medium; or

b) the temperature is 1°C or more above the critical temperature for the reaction medium, and the pressure is at or above the critical pressure of the reaction medium; or

c) the temperature is 1°C or more above the critical temperature for the reaction medium, and the pressure is at least 500 kPa above the critical pressure of the reaction medium, and

conducting polymerization of the propylene monomers for a time sufficient to form the branched homopropylene composition having a heat of fusion of 70 J/g, a T_m of 145°C or more and a branching index (g') of 0.97 or less.

45. (Previously Presented) The process of claim 44 wherein the temperature is 2°C or more above the critical temperature for the reaction medium.

46. (Previously Presented) The process of claim 44 wherein the temperature is between 94 and 160°C.

47. (Previously Presented) The process of claim 44 wherein the pressure is 1000 kPa or more above the critical pressure for the reaction medium.

48. (Previously Presented) The process of claim 44 wherein the pressure is between 5.0 and 9 MPa.

49. (Previously Presented) The process of claim 44 wherein the temperature is between 94 and 130°C and the pressure is between 5.0 and 7 MPa.

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50. (Previously Presented) The process of claim 44 wherein solvent is present at 0 to 15 vol %.

51. (cancelled)

52. (cancelled)

53. (Previously Presented) The process of claim 44 where the metallocene catalyst compound is represented by the formula: $L_z(Cp)_2M^mX_n$, where: each Cp is independently a substituted indenyl ring wherein each ring is substituted at the 2 and 4 positions;

z is 0 or 1;

L is a bridging group connecting Cp to Cp, M is a Group 4, 5, or 6 transition metal;

m is 3, 4, 5 or 6;

X is a halogen or a substituted or unsubstituted hydrocarbyl group, a substituted or unsubstituted hydrocarboxy group, or a substituted or unsubstituted heteroatom containing group; and

n is m minus 2.

54. (Previously Presented) The process of claim 53 wherein z is 1, L is represented by the formula: R_qSi -where each R is, independently, a substituted or unsubstituted C_1 to C_{20} hydrocarbyl group and q is 1, 2, 3 or 4; and both Cp groups are indenyl rings substituted at the 2 and 4 positions.

55. (Currently Amended) The process of any of claims 44 to 52 wherein the metallocene catalyst compound comprises one or more of:

dimethylsiladiyl(2-methyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-methyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ hafnium dichloride;
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ hafnium dichloride;
dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ hafnium dimethyl;

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dimethylsiladiyl siladiyl(2-iso-propyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂hafnium dichloride;
dimethylsiladiyl(2-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂hafnium dichloride;
9-silafluorendiyl(2-methyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-ethyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-methyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂hafnium dichloride;
9-silafluorendiyl(2-ethyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂hafnium dichloride;
9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂hafnium dichloride;
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂hafnium dichloride;
9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂hafnium dichloride;
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂hafnium dichloride;
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂hafnium dichloride;
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂hafnium dichloride;
dimethylsiladiyl(2-methyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-methyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂hafnium dimethyl;
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂hafnium dimethyl;
dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂hafnium dimethyl;
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂hafnium dimethyl;
dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂hafnium dimethyl;
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂hafnium dimethyl;

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dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂hafnium dimethyl;
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂hafnium dimethyl;
9-silafluorendiyl(2-methyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-ethyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-*n*-propyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-*n*-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-methyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂hafnium dimethyl;
9-silafluorendiyl(2-ethyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂hafnium dimethyl;
9-silafluorendiyl(2-*n*-propyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂hafnium dimethyl;
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂hafnium dimethyl;
9-silafluorendiyl(2-*n*-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂hafnium dimethyl;
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂hafnium dimethyl;
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂hafnium dimethyl;
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂hafnium dimethyl;
dimethylsiladiyl(2-methyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-*n*-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-*n*-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-methyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dichloride;
dimethylsiladiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dichloride;
dimethylsiladiyl(2-*n*-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dichloride;
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dichloride;
dimethylsiladiyl(2-*n*-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dichloride;
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dichloride;

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dimethylsiladiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dichloride;
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dichloride;
9-silafluorendiyl(2-methyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂zirconium dichloride;
dimethylsiladiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dichloride;
9-silafluorendiyl(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂zirconium dichloride;
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂zirconium dichloride;
9-silafluorendiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂zirconium dichloride;
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂zirconium dichloride;
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂zirconium dichloride;
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂zirconium dichloride;
9-silafluorendiyl(2-methyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dichloride;
9-silafluorendiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dichloride;
9-silafluorendiyl(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dichloride;
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dichloride;
9-silafluorendiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dichloride;
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dichloride;
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dichloride;
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dichloride;
dimethylsiladiyl(2-methyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂zirconium dimethyl;
dimethylsiladiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂zirconium dimethyl;
dimethylsiladiyl(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂zirconium dimethyl;
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂zirconium dimethyl;
dimethylsiladiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂zirconium dimethyl;
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂zirconium dimethyl;
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂zirconium dimethyl;
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂zirconium dimethyl;
dimethylsiladiyl(2-methyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dimethyl;
dimethylsiladiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dimethyl;
dimethylsiladiyl(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dimethyl;
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dimethyl;
dimethylsiladiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dimethyl;
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂hafnium dimethyl;

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dimethylsiladiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ hafnium dimethyl;
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-methyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-methyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ hafnium dimethyl;
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dichloride;
dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dichloride;
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dichloride;
dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dichloride;
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dichloride;
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dichloride;
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dichloride;

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9-silafluorendiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dichloride;
9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dichloride;
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dichloride;
9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dichloride;
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dichloride;
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dichloride;
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dichloride;
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-isobutyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dimethyl;
dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dimethyl;
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dimethyl;
dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dimethyl;
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;

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9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ hafnium dimethyl;
dimethylsiladiyl(2-methyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
dimethylsiladiyl(2-methyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dichloride;
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dichloride;
dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dichloride;
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dichloride;
dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dichloride;
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dichloride;
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dichloride;
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dichloride;
9-silafluorendiyl(2-methyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-ethyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;

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9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
9-silafluorendiyl(2-methyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dichloride;
9-silafluorendiyl(2-ethyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dichloride;
9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dichloride;
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dichloride;
9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dichloride;
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dichloride;
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dichloride;
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dichloride;
dimethylsiladiyl(2-methyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
dimethylsiladiyl(2-methyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dimethyl;
dimethylsiladiyl(2-ethyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dimethyl;
dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dimethyl;
dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dimethyl;
dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dimethyl;
dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dimethyl;
dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dimethyl;
dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-methyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-ethyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;

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9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
9-silafluorendiyl(2-methyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-ethyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dichloride;
9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dimethyl;
9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ hafnium dimethyl;
~~dimethylsiladiyl(2-methyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylsiladiyl(2-ethyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylsiladiyl(2-n-propyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylsiladiyl(2-iso-propyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylsiladiyl(2-n-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylsiladiyl(2-iso-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylsiladiyl(2-sec-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylsiladiyl(2-tert-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylsiladiyl(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-~~
~~butadiene;~~
~~dimethylsiladiyl(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-~~
~~butadiene;~~
~~dimethylsiladiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-~~
~~butadiene;~~
~~dimethylsiladiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-~~
~~butadiene;~~
~~dimethylsiladiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-~~
~~butadiene;~~
~~dimethylsiladiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-~~
~~butadiene;~~
~~dimethylsiladiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-~~
~~butadiene;~~

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~~dimethylsiladiyl(2 ethyl, 4 [3',5' di iso propylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~dimethylsiladiyl(2 n propyl, 4 [3',5' di iso propylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3-~~
~~butadiene;~~
~~dimethylsiladiyl(2 iso propyl, 4 [3',5' di iso propylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3-~~
~~butadiene;~~
~~dimethylsiladiyl(2 n butyl, 4 [3',5' di iso propylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~dimethylsiladiyl(2 iso butyl, 4 [3',5' di iso propylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3-~~
~~butadiene;~~
~~dimethylsiladiyl(2 sec butyl, 4 [3',5' di iso propylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3-~~
~~butadiene;~~
~~dimethylsiladiyl(2 tert butyl, 4 [3',5' di iso propylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3-~~
~~butadiene;~~
~~dimethylsiladiyl(2 methyl, 4 [3',5' di phenylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~dimethylsiladiyl(2 ethyl, 4 [3',5' di phenylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~dimethylsiladiyl(2 n propyl, 4 [3',5' di phenylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~dimethylsiladiyl(2 iso propyl, 4 [3',5' di phenylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~dimethylsiladiyl(2 n butyl, 4 [3',5' di phenylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~dimethylsiladiyl(2 iso butyl, 4 [3',5' di phenylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~dimethylsiladiyl(2 sec butyl, 4 [3',5' di phenylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~dimethylsiladiyl(2 tert butyl, 4 [3',5' di phenylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~9-silafluorendiyl(2 methyl, 4 [3',5' di tbutylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~9-silafluorendiyl(2 ethyl, 4 [3',5' di tbutylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~9-silafluorendiyl(2 n propyl, 4 [3',5' di tbutylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~9-silafluorendiyl(2 iso propyl, 4 [3',5' di tbutylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~9-silafluorendiyl(2 n butyl, 4 [3',5' di tbutylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~9-silafluorendiyl(2 iso butyl, 4 [3',5' di tbutylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~9-silafluorendiyl(2 sec butyl, 4 [3',5' di tbutylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~9-silafluorendiyl(2 tert butyl, 4 [3',5' di tbutylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3 butadiene;~~
~~9-silafluorendiyl(2 ethyl, 4 [3',5' bis trifluoromethylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3-~~
~~butadiene;~~
~~9-silafluorendiyl(2 n propyl, 4 [3',5' bis trifluoromethylphenyl] indenyl)₂η⁴-1,4 diphenyl 1,3-~~
~~butadiene;~~

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~~9-silafluorendiyl(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~9-silafluorendiyl(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl 1,3-butadiene;~~

~~dimethylamidoborane(2-methyl, 4-[3',5'-di-tert-butylphenyl]indenyl)₂ zirconium dichloride;~~

~~dimethylamidoborane(2-ethyl, 4-[3',5'-di-tert-butylphenyl]indenyl)₂ zirconium dichloride;~~

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dimethylamidoborane(2-n-propyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-iso-propyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-n-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-iso-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-sec-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-tert-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-ethyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-n-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-n-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-methyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-n-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-iso-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-n-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-iso-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-sec-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
dimethylamidoborane(2-tert-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;
~~dimethylamidoborane(2-methyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-butadiene;~~
dimethylamidoborane(2-ethyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-butadiene;

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~~dimethylamido~~borane(2-n-propyl, 4-[3',5'-di-~~t~~butylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~dimethylamido~~borane(2-iso-propyl, 4-[3',5'-di-~~t~~butylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~dimethylamido~~borane(2-n-butyl, 4-[3',5'-di-~~t~~butylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~dimethylamido~~borane(2-iso-butyl, 4-[3',5'-di-~~t~~butylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~dimethylamido~~borane(2-sec-butyl, 4-[3',5'-di-~~t~~butylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~dimethylamido~~borane(2-tert-butyl, 4-[3',5'-di-~~t~~butylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~dimethylamido~~borane(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~dimethylamido~~borane(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~dimethylamido~~borane(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~dimethylamido~~borane(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~dimethylamido~~borane(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~dimethylamido~~borane(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~dimethylamido~~borane(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~dimethylamido~~borane(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~dimethylamido~~borane(2-n-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~dimethylamido~~borane(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

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~~dimethylamidoborane(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylamidoborane(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylamidoborane(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylamidoborane(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylamidoborane(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylamidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylamidoborane(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylamidoborane(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylamidoborane(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylamidoborane(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylamidoborane(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~
~~dimethylamidoborane(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~
dimethylamidoborane(2-methyl, 4-[3',5'-di-*t*-butylphenyl]indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-ethyl, 4-[3',5'-di-*t*-butylphenyl]indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-n-propyl, 4-[3',5'-di-*t*-butylphenyl]indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-iso-propyl, 4-[3',5'-di-*t*-butylphenyl]indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-n-butyl, 4-[3',5'-di-*t*-butylphenyl]indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-iso-butyl, 4-[3',5'-di-*t*-butylphenyl]indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-sec-butyl, 4-[3',5'-di-*t*-butylphenyl]indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-tert-butyl, 4-[3',5'-di-*t*-butylphenyl]indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂ zirconium dimethyl;

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dimethylamidoborane(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-ethyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-n-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
dimethyl dimethylamidoborane(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium
dimethyl;

dimethylamidoborane(2-n-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-methyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-n-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-iso-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-n-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-iso-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-sec-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
dimethylamidoborane(2-tert-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
diisopropylamidoborane(2-methyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
diisopropylamidoborane(2-ethyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
diisopropylamidoborane(2-n-propyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
diisopropylamidoborane(2-iso-propyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
diisopropylamidoborane(2-n-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
diisopropylamidoborane(2-iso-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
diisopropylamidoborane(2-sec-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
diisopropylamidoborane(2-tert-butyl, 4-[3',5'-di-tbutylphenyl] indenyl)₂ zirconium dichloride;
diisopropylamidoborane(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;

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diisopropylamidoborane(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-ethyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-n-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium

dichloride;

diisopropylamidoborane(2-n-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium

dichloride;

diisopropylamidoborane(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium

dichloride;

diisopropylamidoborane(2-methyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-n-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-iso-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-n-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-iso-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-sec-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-tert-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;

diisopropylamidoborane(2-methyl, 4-[3',5'-di-tert-butylphenyl] indenyl)₂ n⁴-1,4-diphenyl-1,3-

butadiene;

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~~diisopropylamido~~borane(2 ethyl, 4 [3',5'-di tbutylphenyl] indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~diisopropylamido~~borane(2 n-propyl, 4 [3',5'-di tbutylphenyl] indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~diisopropylamido~~borane(2 iso-propyl, 4 [3',5'-di tbutylphenyl] indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~diisopropylamido~~borane(2 n-butyl, 4 [3',5'-di tbutylphenyl] indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~diisopropylamido~~borane(2 iso-butyl, 4 [3',5'-di tbutylphenyl] indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~diisopropylamido~~borane(2 sec-butyl, 4 [3',5'-di tbutylphenyl] indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~diisopropylamido~~borane(2 tert-butyl, 4 [3',5'-di tbutylphenyl] indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~diisopropylamido~~borane(2 ethyl, 4 [3',5'-bis-trifluoromethylphenyl] indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~diisopropylamido~~borane(2 n-propyl, 4 [3',5'-bis-trifluoromethylphenyl] indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~diisopropylamido~~borane(2 iso-propyl, 4 [3',5'-bis-trifluoromethylphenyl] indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~diisopropylamido~~borane(2 n-butyl, 4 [3',5'-bis-trifluoromethylphenyl] indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~diisopropylamido~~borane(2 iso-butyl, 4 [3',5'-bis-trifluoromethylphenyl] indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~diisopropylamido~~borane(2 sec-butyl, 4 [3',5'-bis-trifluoromethylphenyl] indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~diisopropylamido~~borane(2 tert-butyl, 4 [3',5'-bis-trifluoromethylphenyl] indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~diisopropylamido~~borane(2 ethyl, 4 [3',5'-di iso-propylphenyl] indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~diisopropylamido~~borane(2 n-propyl, 4 [3',5'-di iso-propylphenyl] indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

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~~diisopropylamidoborane(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~diisopropylamidoborane(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~diisopropylamidoborane(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~diisopropylamidoborane(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~diisopropylamidoborane(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~diisopropylamidoborane(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~diisopropylamidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~diisopropylamidoborane(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~diisopropylamidoborane(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~diisopropylamidoborane(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~diisopropylamidoborane(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~diisopropylamidoborane(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~diisopropylamidoborane(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

diisopropylamidoborane(2-methyl, 4-[3',5'-di-*t*-butylphenyl]indenyl)₂ zirconium dimethyl;

diisopropylamidoborane(2-ethyl, 4-[3',5'-di-*t*-butylphenyl]indenyl)₂ zirconium dimethyl;

diisopropylamidoborane(2-n-propyl, 4-[3',5'-di-*t*-butylphenyl]indenyl)₂ zirconium dimethyl;

diisopropylamidoborane(2-iso-propyl, 4-[3',5'-di-*t*-butylphenyl]indenyl)₂ zirconium dimethyl;

diisopropylamidoborane(2-n-butyl, 4-[3',5'-di-*t*-butylphenyl]indenyl)₂ zirconium dimethyl;

diisopropylamidoborane(2-iso-butyl, 4-[3',5'-di-*t*-butylphenyl]indenyl)₂ zirconium dimethyl;

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diisopropylamidoborane(2-sec-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;
diisopropylamidoborane(2-*tert*-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;
diisopropylamidoborane(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium
dimethyl;
diisopropylamidoborane(2-*n*-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium
dimethyl;
diisopropylamidoborane(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium
dimethyl;
diisopropylamidoborane(2-*n*-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium
dimethyl;
diisopropylamidoborane(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium
dimethyl;
diisopropylamidoborane(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium
dimethyl;
diisopropylamidoborane(2-*tert*-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium
dimethyl;
diisopropylamidoborane(2-ethyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
diisopropylamidoborane(2-*n*-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
diisopropylamidoborane(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium
dimethyl;
diisopropylamidoborane(2-*n*-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
diisopropylamidoborane(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
diisopropylamidoborane(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;
diisopropylamidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
diisopropylamidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
diisopropylamidoborane(2-*n*-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
diisopropylamidoborane(2-iso-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
diisopropylamidoborane(2-*n*-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
diisopropylamidoborane(2-iso-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
diisopropylamidoborane(2-sec-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;
diisopropylamidoborane(2-*tert*-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;

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bis(trimethylsilyl)amidoborane(2-methyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dichloride;
bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dichloride;
bis(trimethylsilyl)amidoborane(2-*n*-propyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dichloride;
bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dichloride;
bis(trimethylsilyl)amidoborane(2-*n*-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dichloride;
bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dichloride;
bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dichloride;
bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dichloride;
bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
bis(trimethylsilyl)amidoborane(2-*n*-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
bis(trimethylsilyl)amidoborane(2-*n*-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dichloride;
bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;

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bis(trimethylsilyl)amidoborane(2-n-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;

bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;

bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;

bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;

bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;

bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dichloride;

bis(trimethylsilyl)amidoborane(2-methyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;

bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;

bis(trimethylsilyl)amidoborane(2-n-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;

bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;

bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;

bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;

bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;

bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dichloride;

bis(trimethylsilyl)amidoborane(2-methyl, 4-[3',5'-di-tert-butylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-butadiene;

bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-di-tert-butylphenyl] indenyl)₂ η⁴-1,4-diphenyl-1,3-butadiene;

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~~bis(trimethylsilyl)amido~~borane(2-n-propyl, 4-[3',5'-di-~~t~~butylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~bis(trimethylsilyl)amido~~borane(2-iso-propyl, 4-[3',5'-di-~~t~~butylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~bis(trimethylsilyl)amido~~borane(2-n-butyl, 4-[3',5'-di-~~t~~butylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~bis(trimethylsilyl)amido~~borane(2-iso-butyl, 4-[3',5'-di-~~t~~butylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~bis(trimethylsilyl)amido~~borane(2-sec-butyl, 4-[3',5'-di-~~t~~butylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~bis(trimethylsilyl)amido~~borane(2-tert-butyl, 4-[3',5'-di-~~t~~butylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~bis(trimethylsilyl)amido~~borane(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~bis(trimethylsilyl)amido~~borane(2-n-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~bis(trimethylsilyl)amido~~borane(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~bis(trimethylsilyl)amido~~borane(2-n-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~bis(trimethylsilyl)amido~~borane(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~bis(trimethylsilyl)amido~~borane(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~bis(trimethylsilyl)amido~~borane(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~bis(trimethylsilyl)amido~~borane(2-ethyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~bis(trimethylsilyl)amido~~borane(2-n-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

~~bis(trimethylsilyl)amido~~borane(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;

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~~bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~bis(trimethylsilyl)amidoborane(2-methyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~bis(trimethylsilyl)amidoborane(2-n-propyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

~~bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-phenylphenyl]indenyl)₂η⁴-1,4-diphenyl-1,3-butadiene;~~

bis(trimethylsilyl)amidoborane(2-methyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;
bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;
bis(trimethylsilyl)amidoborane(2-n-propyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;

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bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-*t*-butylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-*n*-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-*n*-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-bis-trifluoromethylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-*n*-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium

dimethyl;

bis(trimethylsilyl)amidoborane(2-*n*-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;

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bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-iso-propylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-methyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-ethyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-n-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-iso-propyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-n-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;

bis(trimethylsilyl)amidoborane(2-iso-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;

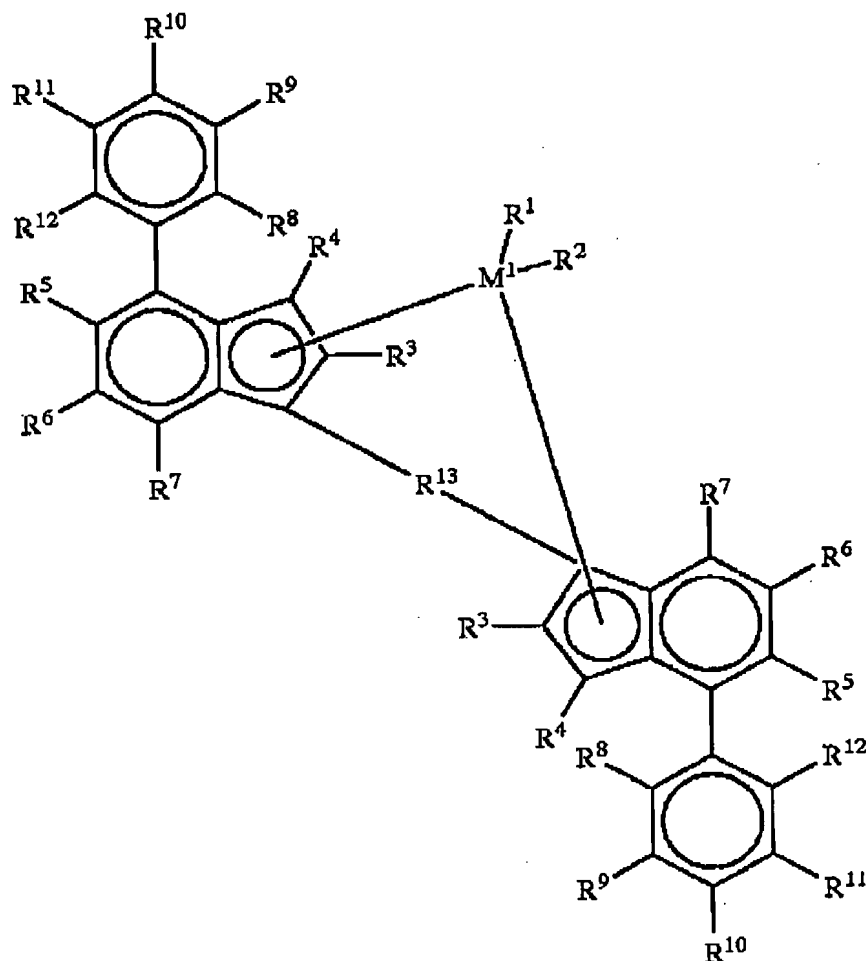
bis(trimethylsilyl)amidoborane(2-sec-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl;

and bis(trimethylsilyl)amidoborane(2-tert-butyl, 4-[3',5'-di-phenylphenyl] indenyl)₂ zirconium dimethyl.

56. (Currently Amended) The process of claim 44 where the metallocene compound is represented by the formula:

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(I)



wherein: M^1 is selected from the group consisting of titanium, zirconium, hafnium, vanadium, niobium, tantalum, chromium, molybdenum and tungsten;

R^1 and R^2 are identical or different, and are one of a hydrogen atom, a C_1 - C_{10} alkyl group, a C_1 - C_{10} alkoxy group, a C_6 - C_{10} aryl group, a C_6 - C_{10} aryloxy group, a C_2 - C_{10} alkenyl group, a C_2 - C_{40} alkenyl group, a C_7 - C_{40} arylalkyl group, a C_7 - C_{40} alkylaryl group, a C_9 - C_{40} arylalkenyl group, an OH group or a halogen atom;

R^1 and R^2 may also be joined together to form an alkanediyl group or a conjugated C_{4-40} diene ligand which is coordinated to M^1 in a metallocyclopentene fashion;

R^1 and R^2 may also be identical or different conjugated dienes, optionally substituted with one or more hydrocarbyl, tri(hydrocarbyl)silyl groups or hydrocarbyl,

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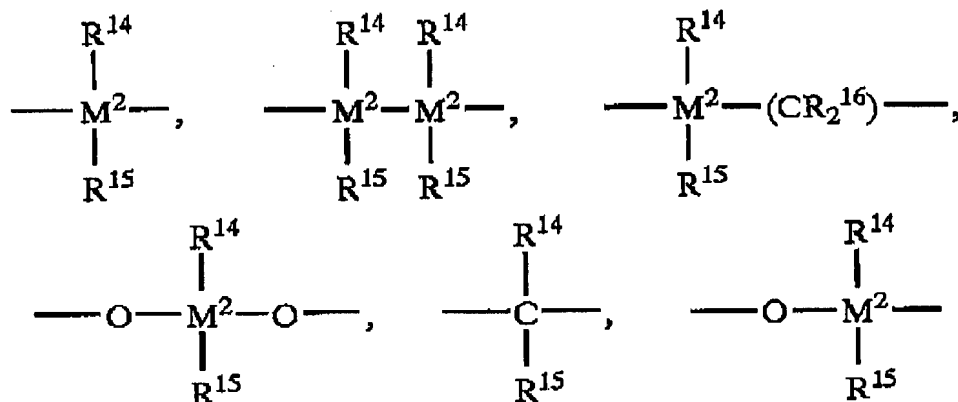
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tri(hydrocarbyl)silylhydrocarbyl groups, said dienes having up to 30 atoms not counting hydrogen and forming a .pi. complex with M₁, ~~examples include 1,4-diphenyl 1,3-butadiene, 1,3-pentadiene, 2-methyl 1,3-pentadiene, 2,4-hexadiene, 1-phenyl 1,3-pentadiene, 1,4-dibenzyl 1,3-butadiene, 1,4-ditolyl 1,3-butadiene, 1,4-bis(trimethylsilyl) 1,3-butadiene, and 1,4-dinaphthyl 1,3-butadiene;~~

each R³ is identical or different from the other R³ and is each a halogen atom, a C₁-C₁₀ alkyl group which may be halogenated, a C₆-C₁₀ aryl group which may be halogenated, a C₂-C₁₀ alkenyl group, a C₇-C₄₀-arylalkyl group, a C₇-C₄₀ alkylaryl group, a C₉-C₄₀ arylalkenyl group, a --NR'₂, --SR', --OR', --OSiR'₃ or --PR'₂ radical, wherein R' is one of a halogen atom, a C₁-C₁₀ alkyl group, or a C₆-C₁₀ aryl group;

R⁴ to R¹² are identical or different and are hydrogen, or are as defined for R³ or two or more adjacent radicals R⁵ to R⁷ together with the atoms connecting them form one or more rings;

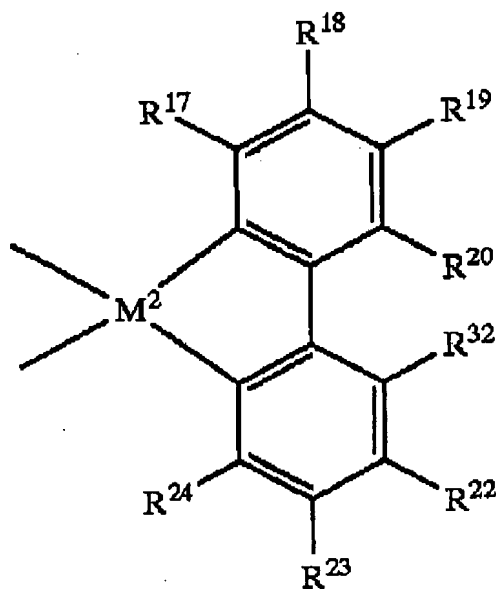
R¹³ is:



--B(R¹⁴)--, --Al(R¹⁴)--, --Ge--, --Sn--, --O--, --S--, --SO--, --SO₂--, --N(R¹⁴)--, --CO--, --P(R¹⁴)--, or --P(O)(R¹⁴)--;

wherein: R¹⁴, R¹⁵ and R¹⁶ are identical or different and are a hydrogen atom, a halogen atom, a C₁-C₂₀ branched or linear alkyl group, a C₁-C₂₀ fluoroalkyl or silaalkyl group, a C₆-C₃₀ aryl group, a C₆-C₃₀ fluoroaryl group, a C₁-C₂₀ alkoxy group, a C₂-C₂₀ alkenyl group, a C₇-C₄₀ arylalkyl group, a C₈-C₄₀ arylalkenyl group, a C₇-C₄₀ alkylaryl group, or R¹⁴ and R¹⁵, together with the atoms binding them, form a cyclic ring; or, R¹³ is represented by the formula;

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wherein: R^{17} to R^{24} are as defined for R^1 and R^2 , or two or more adjacent radicals R^{17} to R^{24} , including R^{20} and R^{21} , together with the atoms connecting them form one or more rings; and M^2 is one or more carbons, silicon, germanium or tin.

57. (cancelled)

58. (Currently Amended) The process of ~~claim 1~~ claim 44 where the metallocene catalyst compound having at least two indenyl rings or derivative of indenyl rings, wherein each ring is substituted at the 2 and 4 positions and is a substituted or unsubstituted silyl bridged bis-indenyl metallocene.

59. (Previously Presented) The process of claim 44 where the metallocene catalyst compound is combined with propylene in an amount of up to 1.0 mole % hydrogen in the reactor.

60. (cancelled)

61. (Previously Presented) The process of claim 44 wherein the activator comprises alumoxane.

62. (cancelled)

63. (Previously Presented) The process of claim 44 wherein the activator is selected from the group consisting of:

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trimethylammonium tetraphenylborate,
triethylammonium tetraphenylborate,
tripropylammonium tetraphenylborate,
tri(n-butyl)ammonium tetraphenylborate,
tri(tert-butyl)ammonium tetraphenylborate,
N,N-dimethylanilinium tetraphenylborate,
N,N-diethylanilinium tetraphenylborate,
N,N-dimethyl-(2,4,6-trimethylanilinium)tetraphenylborate,
trimethylammonium tetrakis(pentafluorophenyl)borate,
triethylammonium tetrakis(pentafluorophenyl)borate,
tripropylammonium tetrakis(pentafluorophenyl)borate,
tri(n-butyl)ammonium tetrakis(pentafluorophenyl)borate,
tri(sec-butyl)ammonium tetrakis(pentafluorophenyl)borate,
N,N-dimethylanilinium tetrakis(pentafluorophenyl)borate,
N,N-diethylanilinium tetrakis(pentafluorophenyl)borate,
N,N-dimethyl-(2,4,6-trimethylanilinium)tetrakis(pentafluorophenyl)borate,
trimethylammonium tetrakis-(2,3,4,6-tetrafluorophenyl)borate,
triethylammonium tetrakis-(2,3,4,6-tetrafluorophenyl)borate,
tripropylammonium tetrakis-(2,3,4,6-tetrafluorophenyl)borate,
tri(n-butyl)ammonium tetrakis-(2,3,4,6-tetrafluorophenyl)borate,
dimethyl(tert-butyl)ammonium tetrakis-(2,3,4,6-tetrafluorophenyl)borate,
N,N-dimethylanilinium tetrakis-(2,3,4,6-tetrafluorophenyl)borate,
N,N-diethylanilinium tetrakis-(2,3,4,6-tetrafluorophenyl)borate,
N,N-dimethyl-(2,4,6-trimethylanilinium)tetrakis-(2,3,4,6-tetrafluorophenyl)borate,
trimethylammonium tetrakis(perfluoronaphthyl)borate,
triethylammonium tetrakis(perfluoronaphthyl)borate,
tripropylammonium tetrakis(perfluoronaphthyl)borate,
tri(n-butyl)ammonium tetrakis(perfluoronaphthyl)borate,
tri(tert-butyl)ammonium tetrakis(perfluoronaphthyl)borate,
N,N-dimethylanilinium tetrakis(perfluoronaphthyl)borate,
N,N-diethylanilinium tetrakis(perfluoronaphthyl)borate,
N,N-dimethyl-(2,4,6-trimethylanilinium)tetrakis(perfluoronaphthyl)borate,

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trimethylammonium tetrakis(perfluorobiphenyl)borate,
triethylammonium tetrakis(perfluorobiphenyl)borate,
tripropylammonium tetrakis(perfluorobiphenyl)borate,
tri(n-butyl)ammonium tetrakis(perfluorobiphenyl)borate,
tri(tert-butyl)ammonium tetrakis(perfluorobiphenyl)borate,
N,N-dimethylanilinium tetrakis(perfluorobiphenyl)borate,
N,N-diethylanilinium tetrakis(perfluorobiphenyl)borate,
N,N-dimethyl-(2,4,6-trimethylanilinium)tetrakis(perfluorobiphenyl)borate,
trimethylammonium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate,
triethylammonium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate,
tripropylammonium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate,
tri(n-butyl)ammonium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate,
tri(tert-butyl)ammonium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate,
N,N-dimethylanilinium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate,
N,N-diethylanilinium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate,
N,N-dimethyl-(2,4,6-trimethylanilinium)tetrakis(3,5-bis(trifluoromethyl)phenyl)borate,
di-(iso-propyl)ammonium tetrakis(pentafluorophenyl)borate,
dicyclohexylammonium tetrakis(pentafluorophenyl)borate;
tri(o-tolyl)phosphonium tetrakis(pentafluorophenyl)borate,
tri(2,6-dimethylphenyl)phosphonium tetrakis(pentafluorophenyl)borate,
trollium tetraphenylborate,
triphenylcarbenium tetraphenylborate,
triphenylphosphonium tetraphenylborate,
triethylsilylium tetraphenylborate,
benzene(diazonium)tetraphenylborate,
trollium tetrakis(pentafluorophenyl)borate,
triphenylcarbenium tetrakis(pentafluorophenyl)borate,
triphenylphosphonium tetrakis(pentafluorophenyl)borate,
triethylsilylium tetrakis(pentafluorophenyl)borate,
benzene(diazonium) tetrakis(pentafluorophenyl)borate,
trollium tetrakis-(2,3,4,6-tetrafluorophenyl)borate,
triphenylcarbenium tetrakis-(2,3,4,6-tetrafluorophenyl)borate,

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triphenylphosphonium tetrakis-(2,3,4,6-tetrafluorophenyl)borate,
triethylsilylium tetrakis-(2,3,4,6-tetrafluorophenyl)borate,
benzene(diazonium)tetrakis-(2,3,4,6-tetrafluorophenyl)borate,
tropillium tetrakis(perfluoronaphthyl)borate,
triphenylcarbenium tetrakis(perfluoronaphthyl)borate,
triphenylphosphonium tetrakis(perfluoronaphthyl)borate,
triethylsilylium tetrakis(perfluoronaphthyl)borate,
benzene(diazonium) tetrakis(perfluoronaphthyl)borate,
tropillium tetrakis(perfluorobiphenyl)borate,
triphenylcarbenium tetrakis(perfluorobiphenyl)borate,
triphenylphosphonium tetrakis(perfluorobiphenyl)borate,
triethylsilylium tetrakis(perfluorobiphenyl)borate,
benzene(diazonium) tetrakis(perfluorobiphenyl)borate,
tropillium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate,
triphenylcarbenium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate,
triphenylphosphonium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate,
triethylsilylium tetrakis(3,5-bis(trifluoromethyl)phenyl)borate, and
benzene(diazonium)tetrakis(3,5-bis(trifluoromethyl)phenyl)borate.

64. (Currently Amended) The process of claim 44 wherein the activator comprises one or more of:
dimethylanilinium tetrakis(perfluorophenyl)boron, tri(n-butyl)ammonium
~~tetrakis(pentafluorophenyl)boron~~ ~~tetrakis(pentafluorophenyl)boron~~, N,N-dimethylanilinium
tetra(perfluorophenyl)borate and/or triphenylcarbenium tetra(perfluorophenyl)borate.

65. (Previously Presented) The process of claim 44 where the catalyst compound, the activator or both are supported.

66. (Currently Amended) The process of ~~claim 44~~ claim 65 wherein the support comprises silica.

67. (Previously Presented) The process of claim 44 wherein the process occurs in an autoclave reactor.

68. (Previously Presented) The process of claim 44 wherein the process occurs in a tubular reactor.

69. (Previously Presented) The process of claim 44 wherein the process occurs in a loop reactor.

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70. (Previously Presented) The process of claim 44 wherein the polymerization medium comprises at least two phases.

71. (Previously Presented) The process of claim 44 wherein the catalyst activity is at least 2597 grams of polymer per gram of catalyst per hour.